

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-27. (cancelled)

Sub 28. (currently amended) Apparatus for cold forging of metal workpieces of varying diameter, said apparatus comprising:

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- (i) two opposed dies;
  - (ii) each said die ~~having~~ having a first die part and a second die part;
  - (iii) said second die part being enlarged relative to the first die part, whereby to form stress alleviating means for alleviating stress to the workpiece during cold forging;
  - (iv) the second die part being adapted to allow part of the workpiece to project therefrom, whereby said projecting part of the workpiece is upset and enlarged during cold forging;
  - (v) adjusting means for adjusting the distance of said projecting part of the workpiece beyond said second die part; [[and]]
  - (vi) means for providing for a uniform forging pressure, ~~for any diameter~~ varying diameters of workpiece during forging[[.]]; and
  - (vii) control means for automatic control of said pressure, said control means including a sensor acting to ensure that there is no need to adjust the pressure applied whatever the diameter of the workpiece.
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29. (currently amended) Apparatus as defined in Claim 28, wherein said ~~means for providing for a uniform working pressure includes a sensor~~ is adjacent a face of the dies from

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which the workpiece projects.

30. (currently amended) Apparatus as defined in Claim <sup>2</sup>29, wherein said opposed dies define a face and wherein said ~~means for providing for a uniform working pressure~~ sensor is adjacent said face.

Sub 31. (currently amended) Apparatus as defined in Claim 29, further comprising pressing means for pressing the die ~~[[pates]]~~ parts together in a pressing direction, and pressure applying means ~~for applying~~ pressure in a direction substantially at 90° to said ~~[[press]]~~ pressing direction.

32. (previously presented) Apparatus as defined in Claim <sup>4</sup>31, wherein the pressing means comprise an hydraulic press acting substantially vertically.

33. (previously presented) Apparatus as defined in Claim <sup>4</sup>31, wherein the pressure applying means comprise an hydraulic press acting substantially horizontally.

34. (previously presented) Apparatus as defined in Claim <sup>6</sup>33, wherein at least the distance between the dies and the substantially horizontally acting hydraulic press is directly adjustable.

35. (previously presented) Apparatus as defined in Claim <sup>6</sup>33, wherein at least the distance (v) between the dies and the substantially-horizontally acting hydraulic press is indirectly adjustable.

36. (previously presented) Apparatus as defined in Claim <sup>6</sup>33, wherein the distance (v) between the dies and the substantially-horizontally acting hydraulic press is adjustable by adjusting

a forging piston for effecting forging.

37. (previously presented) Apparatus as defined in Claim <sup>6</sup>~~33~~, wherein the distance between the dies and the substantially-horizontally acting hydraulic press is adjustable by adjustment of a forging pad on which a forging piston can act.

38. (previously presented) Apparatus as defined in Claims <sup>5</sup>~~32~~, wherein the pressure of the substantially vertically acting hydraulic press is adjustable.

39. (previously presented) Apparatus as defined in Claim <sup>1</sup>~~28~~, wherein the enlarged die part comprises a substantially U-shaped groove therein.

40. (previously presented) Apparatus as defined in Claim <sup>1</sup>~~28~~, wherein the first die part has an internal die configuration substantially complementary to the external configuration of a major part of a workpiece which is to be forged.

41. (**currently amended**) A method of cold forging elongate metal workpieces of varying diameter, the method comprising the steps of:

(i) providing two opposed dies;

(ii) providing each die with a first die part and with a second die part which is enlarged with respect to the first die part to form stress alleviating means for alleviating stress to the workpiece during cold forging[.];

(iii) inserting an elongate workpiece between the dies so that the first die part receives a main part of the workpiece and part of the workpiece projects through and beyond the second die part;

(iv) upsetting the projecting part, with a uniform forging pressure regardless of the diameter of the workpiece, so that the projecting part flows into the enlarged second die part[.];

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(v) providing that the distance of the projecting part of the workpiece beyond the second die part is adjustable; and

(vi) providing control means for automatic control of said pressure whereby there is no need to adjust the pressure applied whatever the diameter of the workpiece.

42. (previously presented) A method as defined in Claim 41, further comprising the step of providing in each die a relief channel for receiving a rib of the workpiece.

43. (previously presented) A method as defined in Claim 41, further comprising the step of forming a thread on the enlarged part of the workpiece.

44. (previously presented) A method as defined in Claim 41, further comprising the step of adjusting the distance of the projecting part of the workpiece beyond the second die part.

45. (new) A method of cold forging elongate metal workpieces of varying diameter, the method comprising the steps of:

(i) providing two opposed dies;

(ii) providing each die with a first die part and with a second die part which is enlarged with respect to the first die part to form stress alleviating means for alleviating stress to the workpiece during cold forging;

(iii) inserting an elongate workpiece between the dies so that the first die part receives a main part of the workpiece and part of the workpiece projects through and beyond the second die part;

(iv) providing a pressing piston facing a face of the opposed dies from which face the workpiece projects;

(v) upsetting the projecting part, with a forging pressure applied from said press to said projecting part *by the pressing piston* so that the projecting part flows into the enlarged second die part; and

(vi) ceasing application of the forging pressure when a spacing between the press and said face reaches a predetermined distance.

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46. (new) The method of claim 45, wherein step (vi) is performed without allowing the press and said face to physically contact, while allowing upsetting of the projecting part to continue.

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47. (new) The method of claim 45, further comprising the steps of providing a sensor between said face and said press, said sensor being adjacent to said face and defining said predetermined distance; and

actuating said ceasing by said sensor when the spacing between the press and said face has reached said predetermined distance.

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